By the present amendment, independent claims 1, 7, 8, and 10 have been amended to clarify features of the present invention in light of the comments by the Examiner. Dependent claims 2-6 and 11-13 have been amended. New dependent claims 14-16 have been added to further clarify features of independent claims. This change is believed to introduce no new matter, and its entry is respectfully requested.

Rejections under 35 U.S.C. 101

Claims 8 and 9 stand rejected under 35 U.S.C. 101 as being allegedly unpatentable because the claimed invention is directed to non-statutory subject matter.

With respect to claim 8, the Examiner argues that claim recites "a program for causing a computer to execute...", this is merely software, and it has been held that software without a required computer-readable medium storing the software that, when executed, causes the computer to perform a particular process or method (MPEP 2106.01) is merely nonfunctional descriptive material and non-statutory under 35 U.S.C. 101.

1. The Claimed Invention Recites A Process Of Providing Appropriate Service By A Computer to A User of A Repeated Use Of A Product.

The Federal Circuit addressed the application of Section 101 to computer data structure claims in the *In re Lowry* case. *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1030 (Fed. Cir.1994). In the *In re Lowry* case, the Federal Circuit reversed a decision by the Board that denied patentable weight to the patent applicant's data structure limitations under a printed matter rejection. The *In re Lowry* Court analyzed the application of the printed matter rejection in view of the Applicant's claims for a

data structure. The court concluded, in the *In re Lowry* case, that Lowry's data structures are processed by a machine, and thus the printed matter cases have no factual relevance to Lowry's claims. *In re Lowry*, 32 F.3d at 1583.

Similar to Lowry's data structure claims, Applicant recites, in claim 8, "a method for ... <u>receiving</u> from a reader/writer section which has performed reading from a writable storage medium attached to the product presented by the product user, the storage information of the writable storage medium acquired by the reading operation. The method further includes a step of "<u>recognizing</u> the use history of the product from the storage information acquired". The method further includes a step of "<u>judging</u> the service content by checking the use history recognized in a table where service content is defined according to the number of repeated uses of the product". The method further includes a step of "<u>executing</u> a processing according to the service content judged and outputting the processing result to an output apparatus". The method finally includes a step of "<u>writing</u> information as to reuse in the writable storage medium that the process corresponding to the executed service content has been performed by the step of executing". Thus, the steps of "receiving", "recognizing", "judging", "executing" and "writing" clearly constitutes a series of steps or acts to be a process. See MPEP 2106.01, cited by the Examiner, which states that "the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where <u>the computer executes the instructions set forth in the computer program</u>". (Emphases added). In concluding that Lowry's data structure claim is neither analogous to printed matter or merely representative of underlying data in a database, the *In re Lowry* Court found that Lowry's data structures "contain both information used by application programs and information

regarding their physical interrelationships within a memory." *Id* at 1583. Accordingly, similar to Lowry's data structure claims, Applicant's claims recite a computer implemented process of providing an appropriate service by a computer to a user of a repeated use of the product, and thus recite statutory subject matter.

2.   The Claimed Invention Provides Tangible Benefits For Providing Appropriate Service By A Computer to A User of A Repeated Use Of A Product.

In <u>State Street Bank & Trust Co. v. Signature Financial Group Inc.</u>, 149 F3d at 1368, the court stated that the question of whether a claim encompasses statutory subject matter should not focus on *which* of the four categories of subject matter a claim is directed to – process, machine, manufacture, or composition of matter – but rather on the essential characteristics of the subject matter, in particular, *its practical utility*. The claimed invention provides a useful, concrete and tangible result. It is useful for the program to provide appropriate services to a user of a repeated use of a product, particular the services in recycling products. The Specification describes one useful purpose that produces a tangible result from the claimed invention:

> "...the reader/writer device 220 records the number of the repeated uses on the non-contact IC chip 312 attached to the chip-equipped vessel 310, judges a service according to the content, and provides the corresponding service to the consumer 300 (or notifies the method to receive the service)". (Specification, page 12, lines 17 – 23).

The *In re Lowry* Court also noted that the claimed data structures provide tangible benefits. *Id* at 1584. Accordingly, the claimed invention provides tangible benefits by providing appropriate services to a user of a repeated use of a product, particular providing the services in recycling products.

Dependent <u>claim 9</u> recites a <u>computer readable recording medium containing</u> the service providing <u>program according to claim 8</u>, which is executed by the computer. Accordingly claim 9 is also in compliance with 35 USC 101.

Rejections under 35 U.S.C. 102 (b)

As to rejection of claims 1-13 under 35 USC 102 (b) as anticipated by Nagata (US 2002/0077979), such rejection is traversed insofar as it is applicable to the present claims, and reconsideration and withdrawal of the rejection are respectfully requested.

As to the requirements to support a rejection under 35 U.S.C. 102, reference is made to the decision of <u>In re Robertson</u>, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. § 102 requires that <u>each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference.</u> As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, the reference still may anticipate if the element is "inherent" in its <u>disclosure</u>. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessary present in the thing described in the reference, and that it would be so recognized by person of ordinary skill." Moreover, the court pointed out that <u>inherency, however, may not be established by probabilities or possibilities</u>. The mere fact that a certain thing may result from a given set of circumstances in not sufficient.

Applicants note that by the present amendment, independent claims 1, 7, 8, and 10 have been amended to clarify features of the present invention in light of the comments by the Examiner. More particularly claims 1, 7 and 8 have been amended to recite: "a step of (or means for) <u>writing</u> information as to <u>reuse</u> in the writable storage medium that the <u>process</u> corresponding to the executed service content <u>has</u>

been performed by the step of executing". Claim 10 has been amended to recite similar features. Support for the claim language can be found, for example, on lines 17 – 23, page 12 of specification and in FIGS. 1, 2 and 3. When the reader/writer device 220 records the number of the repeated uses on the non-contact IC chip 312 attached to the chip-equipped vessel 310, the device 220 judges a service according to the content, and provides the corresponding service to the consumer 300. This feature resides in promotion of reuse of a product. For this purpose, a writable storage medium 312 is attached to a product such as a vessel. More specifically, each time a vessel is reused, an incentive is given according to a degree of use history (time of use) which is written in the writable storage medium 312.

Since the use history as a base of an incentive should be considered when the product is reused, there will be two options to utilize the use history as an incentive: (1) to utilize the use history including this-time usage, or (2) to utilize the use history of previous usage without including this time usage.

With regard to "promotion of a reuse of a product" noted in the present invention, if the use history including this time usage (Option (1)) is used, there is a possibility of carrying out same handling for the first-time usage and the second-time usage of a product. Of course, this possibility may be removed if the first-time usage is not counted as the use history. If so, however, not only no-count of the first time usage may induce erroneous setting of the table as shown in FIG. 5, but if is possible for a user to use the product only at the first time without reusing it. This is ineffective to an incentive for reuse.

To obviate this, the use history of previous usage (Option (2)) is employed in the present invention. Namely, history information is written (S1009) into the writable storage medium 312 after process (S1007) for deciding a service and process (S1008) for providing the service, has been executed, as shown in FIG. 3. Applicants submit that such feature of writing the service information into the writable storage medium after the process has been executed is now recited in the independent claims and is not disclosed or taught by Nagata.

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Irrespective of the contentions by the Examiner concerning the disclosure of Nagata, Nagata discloses that calculation of information item to be based on an incentive is carried out prior to the service process and the like. Namely, in FIG. 34 of Nagata, a process of changing a status to "Used" is performed at Step 34, and thereafter a service process is performed at Step 42. That is, in Nagata, the step of writing information as to reuse in the in the writable storage medium (Step 34) comes before the step of the process being executed (Step 42). Therefore, Nagata does not disclose or teach writing information as to reuse in the writable storage medium that the process corresponding to the executed service content has been performed by the step of executing. Accordingly, applicant submits that the independent claims and the dependent claims patentably distinguish over Nagata and should be considered allowable thereof.

With respect to the dependent claims, applicant note that such claims also recite further features not disclosed or taught in the cited art. For example, with respect to new dependent claims 14 and 15, Nagata fails to disclose "... a table to be used at the step of judging the service content is stored at the location other than the writable storage medium". Support for the claim language can be found, for example, lines 5-10, page 11 of the specification and in FIG. 5. As an incentive, various services as shown in Table 500 in FIG. 5 are provided in the present invention. Further, the "non-contact IC chip" is used as the "storage medium". As compared with an "IC card" as disclosed in Nagata, a "non-contact IC chip" has a limited storage capacity. Thus, it is desirable to reduce an amount of data to be stored in the "non-contact IC chip" as small as possible. Thus, in the present invention, the table 500 is stored in location other than writable storage medium.

With such an arrangement, it is possible to use a "non-contact IC chip" having a relatively small storage capacity in the present invention. Further, where the Table 500 is provided on the reader/writer section side, it is easier to modify a relationship between times of usage (usage frequency) and an incentive (service) such as in a case of modifying an incentive from one-cent cash-back bonus per usage of a

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product to two-cent cash-back bonus per usage.

In view of the above amendments and remarks, applicant submits that all claims present in this application should now be in condition for allowance and issuance of an action of favorable nature is courteously solicited.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP Deposit Account No. 01-2135 (Docket No. 500.43340X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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